CLAIMS

1. An electrically conductive composition containing a particulate silver compound and a reducing agent.

2. An electrically conductive composition according to claim 1 wherein, the particulate silver compound is one type or two or more types of silver oxide, silver carbonate and silver acetate.

3. An electrically conductive composition according to claim 1 or claim 2 wherein, the average particle diameter of the particulate silver compound is 0.01-10 μm.

4. An electrically conductive composition according to any of claims 1 through 3 wherein, the reducing agent is one type or two or more types of ethylene glycol, diethylene glycol, triethylene glycol and ethylene glycol diacetate.

5. An electrically conductive coating formation method comprising coating the electrically conductive composition according to any of claims 1 through 4 followed by heating.

6. An electrically conductive coating obtained by coating the electrically conductive composition according to any of claims 1 through 4 followed by heating, wherein the silver particles are mutually fused.

7. An electrically conductive coating obtained by coating the electrically conductive composition according to any of claims 1 through 4 followed by heating, wherein the volume resistivity

is 3.0×10^{-6} to 8.0×10^{-6} Ω·cm.

8. An electrically conductive coating obtained by coating the electrically conductive composition according to any of claims 1 through 4 followed by heating for 30 minutes at 150-200°C, which satisfies the following formula (1) when W represents the volume resistivity (Ω·cm) of the electrically conductive coating and X represents its specific gravity.

$$W \leq -1.72 \times 10^{-6} \times X + 2.3 \times 10^{-5} \quad (1)$$

9. An electrically conductive coating obtained by coating the electrically conductive composition according to any of claims 1 through 4 followed by heating for 30 minutes at 150-200°C, which satisfies the following formula (2) when Y represents the number of pores of 100 nm or larger present in a surface area of 10 μm x 10 μm on the uppermost surface of the electrically conductive coating, and Z represents the heating temperature (°C).

$$Y < -46.08 \cdot Z + 10112 \quad (2)$$